

## Effect of single dose gabapentin on postoperative pain and opioid consumption following total abdominal hysterectomy: A dose finding study

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**Introduction:** The multimodal analgesia involves the use of different analgesics and is recommended in current practice to provide superior pain relief and to reduce opioid consumption and its side effects. Gabapentin in different dosages has been found effective to reduce opioid consumption and decreasing postoperative pain. We designed this study to find minimum optimal dose of gabapentin to be used with pethidine in our population.

**Objective:** To determine the minimum effective dose of gabapentin for postoperative pain and reduced opioid consumption in patients undergoing total abdominal hysterectomy.

**Methodology:** After informed consent eighty seven patients were included in this double blinded randomized control study. Patients were assigned randomly to one of the three groups to receive capsule gabapentin orally 300 mg, 600 mg and 900 mg respectively, one hour before surgery. Postoperatively pethidine consumption, pain score and side effects of gabapentin were monitored for 24 hours. Rescue analgesia was given and monitored.

**Results:** The groups did not differ demographically for age, weight and height. Mean pethidine consumption in all three groups was 331 mg /24 hours with no statistical difference among the groups. The results support the use of 300 mg single oral dose of gabapentin in reducing pethidine consumption for postoperative analgesia Rescue analgesia and number of goods and demands on PCIA data were also well matched with no statistical significance. The groups also did not differ for side effects of gabapentin like nausea, vomiting, somnolence and dizziness; however extubation was delayed in 900 mg group.

**Conclusion:** A single oral dose of gabapentin 300 mg given preoperatively is as effective as higher dose of 600-900 mg for postoperative analgesia with reduced pethidine consumption.

### Biography

Anand kumar is working as an Instructor in Anesthesiology, at the Aga Khan University Hospital Karachi Pakistan. Currently he is in charge of Anesthesiology at one of the secondary centre of OBGY (Obs and Gynae) of world renowned and best network (The Aga Khan University). He has been in association with this hospital for more than a decade.

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